

REMARKS

The Examiner rejected claim 25. Claims 26-29 have been added herein. Thus, claims 25-29 are pending. In addition, claim 25 has been amended herein to (1) recite an isolated retroviral packaging cell, and (2) indicate that the nucleic acid can be incorporate into the genome of the quiescent cell. Claim 25 also has been amended to recite that the exogenous nucleic acid encodes a stem cell factor, as opposed to a growth factor.

Applicants' specification fully supports these claim amendments and new claims. For example, page 7, lines 1-3 of Applicants' specification disclose that the surface bound growth factor is preferably stem cell factor. Page 5, lines 14-18 disclose that the quiescent cell can be a hematopoietic stem cell. Page 6, lines 3-6 and lines 18-20 disclose that the growth factor can be expressed as an N-terminal fusion protein with a retroviral envelope protein (e.g., a viral envelope SU protein). Page 6, lines 25-30 disclose that the growth factor can be fused to the envelope protein via a cleavable linker. Thus, no new matter has been added.

In light of these amendments and the following remarks, Applicants respectfully request allowance of claims 25-29.

Claim Objections

The Examiner objected to claim 25 stating that it is not grammatically correct. Claim 25 has been amended herein to insert the word "be," as suggested by the Examiner. Thus, Applicants respectfully request withdrawal of this claim objection.

Rejections under 35 U.S.C. § 112, first paragraph

The Examiner rejected claim 25 under 35 U.S.C. § 112, first paragraph, allegedly because the specification does not reasonably provide enablement for using the recited retroviral packaging cell *in vivo*.

Applicants respectfully disagree. A person having ordinary skill in the art at the time Applicants filed would have been able to make and use the recited retroviral packaging cell without undue experimentation. To further prosecution, however, claim 25 has been amended

herein to recite an isolated retroviral packaging cell. Thus, the Examiner's comments regarding a retroviral packaging cell *in vivo* are moot.

In light of the above, Applicants respectfully request withdrawal of the rejection of claim 25 under 35 U.S.C. §112, first paragraph.

Rejections under 35 U.S.C. § 102(b)

The Examiner rejected claim 25 under 35 U.S.C. § 102(b) as allegedly being anticipated by the Paul et al. reference (WO 94/27643).

Applicants respectfully disagree. To further prosecution, however, claim 25 has been amended herein to recite a retroviral packaging cell comprising (a) a retroviral vector, and (b) an exogenous nucleic acid encoding a stem cell factor. At no point does the Paul *et al.* reference disclose such a retroviral packaging cell. This is particularly true given that the Paul *et al.* reference never mentions stem cell factor and, moreover, fails to provide any teaching or suggestion that a retroviral packaging cell should comprise an exogenous nucleic acid encoding a stem cell factor. Applicants note that, as stated from page 3, line 31 to page 4, line 8 of Applicants' specification, Applicants unexpectedly found that it is possible to incorporate nucleic acid into quiescent cells such as hematopoietic stem cells by using the presently claimed retroviral packaging cells, which display the recited stem cell factor on their surfaces.

In light of the above, Applicants respectfully request withdrawal of the rejection of claim 25 under 35 U.S.C. § 102(b).

Applicant : Stephen J. Russell et al.
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Filed : February 17, 2004
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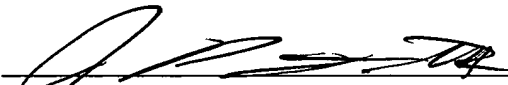
Attorney's Docket No.: 07039-411002

CONCLUSION

Applicants submit that claims 25-29 are in condition for allowance, which action is requested. The Examiner is invited to call the undersigned attorney at the telephone number below if such will advance prosecution of this application. The Commissioner is authorized to charge any fees or credit any overpayments to Deposit Account No. 06-1050.

Respectfully submitted,

Date: December 15, 2005



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